## ABSTRACT OF THE DISCLOSURE

Method for generating steam, in particular ultrapure steam, and steam generator

The invention relates to a method and a steam generator for generating steam, in particular ultrapure steam, by reacting a stoichiometric mixture comprising a fuel, in particular hydrogen, and an oxidizing agent, in particular oxygen, and injecting water into the hot reaction gases, which is distinguished by a high purity of the steam generated.

The object of providing a method for generating an ultrahigh purity steam is achieved, according to the invention, by two-stage combustion, in that the reaction mixture which is generated in a first combustion and evaporation stage is subjected to catalytic afterburning.

A steam generator is distinguished by the fact that a catalytic afterburning chamber (3) with a through-flow body (16) is arranged downstream of the combustion and evaporation chamber (2).

Figure 1